

(No Model.)

A. NACKE & A. BRINKMANN.
CLAMP.

No. 437,403.

Patented Sept. 30, 1890.

Fig. 1.

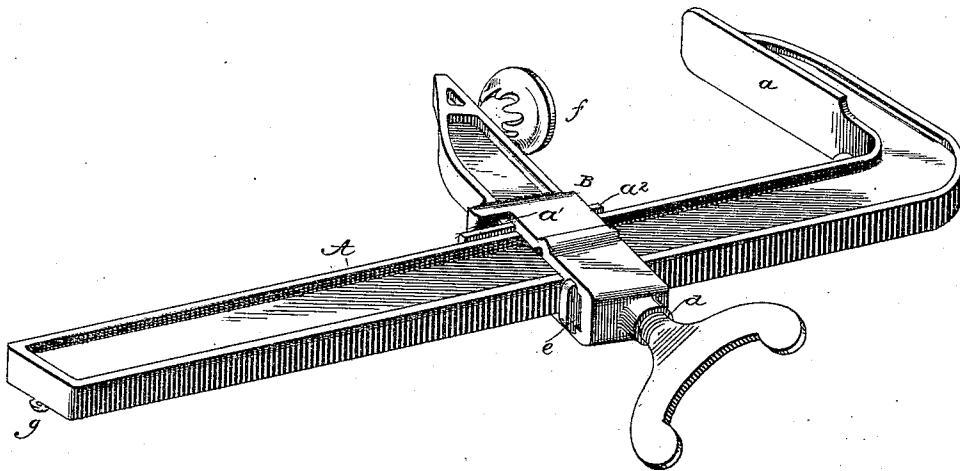
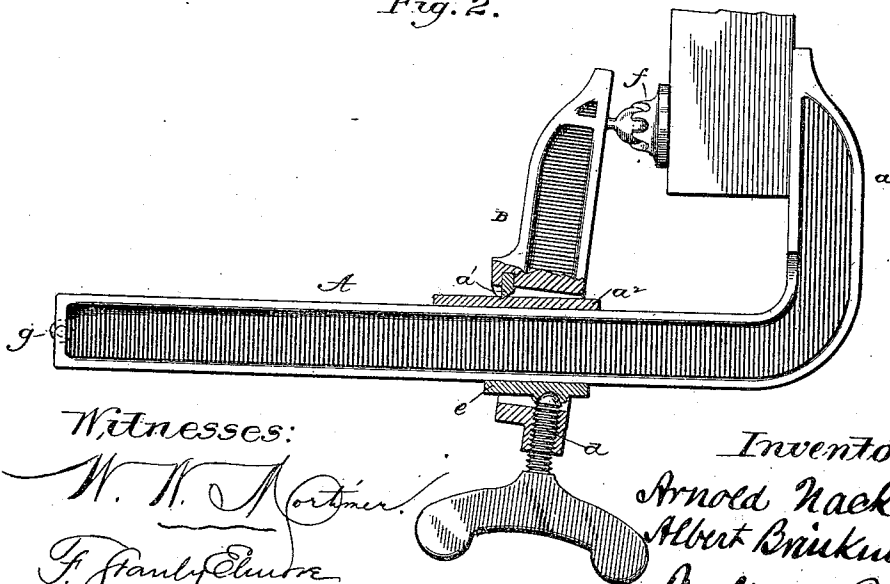


Fig. 2.



Witnesses:

W. H. Mortimer.
F. Stanley Clure.

Inventor:

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By Phil. T. Dodge, Atty

UNITED STATES PATENT OFFICE.

ARNOLD NACKE AND ALBERT BRINKMANN, OF PHILADELPHIA,
PENNSYLVANIA.

CLAMP.

SPECIFICATION forming part of Letters Patent No. 437,403, dated September 30, 1890.

Application filed January 16, 1890. Serial No. 337,132. (No model.)

To all whom it may concern:

Be it known that we, ARNOLD NACKE and ALBERT BRINKMANN, citizens of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, United States of America, have invented certain new and useful Improvements in Clamps, of which the following is a full, clear, and exact description.

10 The aim of our invention is to provide a simple and inexpensive clamp which may be quickly adjusted and secured, and which shall be without springs or other parts liable to become inoperative.

15 In the accompanying drawings, Figure 1 is a perspective view of our clamp. Fig. 2 is a side view of the same with the movable jaw partly in section.

Referring to the drawings, A represents a 20 straight bar or stock with smooth edges and with a rigid jaw *a* extending at right angles from one end.

B is the movable jaw, having an opening or mortise through one end to admit the bar A, 25 on which it slides. Near its rear side the movable jaw is provided with the hardened-steel bearing-plate *a'*, seated in a recess therein and arranged to bear on a hard-metal plate *a''*, which is extended through the opening in the jaw and arranged to slide on the edge of 30 bar A. Against the opposite edge of the bar there is a second bearing-plate *e*, also extended through the movable jaw and recessed to receive the end of a hand-screw *d*, tapped into the jaw near its forward side. Each of 35 the bearing-plates has its ends widened or extended laterally beyond the opening in the jaw, as shown, these widened or shouldered ends serving to carry the plates along the bar with the jaw and to prevent them from sliding endwise out of the latter.

45 In assembling the parts the plates are first inserted into the jaw and turned down to their places and the bar A inserted between them, whereupon it acts to prevent the plates

from escaping under any circumstances. A screw *g* in the end of the bar prevents the accidental escape of the jaw.

In operating the clamp the movable jaw is carried forward until the object to be held 50 bears against both jaws, after which a partial revolution of the screw is sufficient to lock the parts securely and to apply a pressure to the object. As the screw is turned inward it acts to tip the movable jaw on the plate *a'* as a 55 fulcrum toward its companion. The pressure of the jaw and the screw causes the bearing-plates to engage securely with the bar A, so that the jaw is held firmly in position and the edges of the bar protected from the mutilation which it would otherwise receive from 60 the screw and the plate *a'*.

The groove shown in the interior wall is intended to afford an increased opening to facilitate the introduction of the bearing-plate 65 *e* before the bar A is passed through the movable jaw.

What we claim is—

1. In a clamp, the bar A, having the fixed jaw, in combination with the sliding jaw through 70 which the bar A extends, the two bearing-plates seated within the jaw and enlarged at the ends to prevent their escape, and the hand-screw seated in the jaw and acting against the outer plate. 75

2. In combination with the bar with the fixed jaw, the mortised sliding jaw, the plate *a'* seated therein, the loose plate *a''*, extended through the jaw and widened at the ends to keep it in place, the rear plate *e*, also widened 80 at the ends, and the hand-screw *d*.

In testimony whereof I hereunto set my hand, this 6th day of January, 1890, in the presence of two attesting witnesses.

ARNOLD NACKE.
ALBERT BRINKMANN.

Witnesses:

WILLIAM J. KELLY,
HAROLD E. COBB.